

Australian Standard™

**Specification for general purpose
corrugated fibreboard boxes and blanks**



This Australian Standard was prepared by Committee PK-025, Packaging Code. It was approved on behalf of the Council of Standards Australia on 10 March 2006. This Standard was published on 18 May 2006.

The following are represented on Committee PK-025:

Australian Paints Manufacturer's Federation
Canmakers Institute of Australia
Printing Industries Association of Australia

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about Standards can be found by visiting the Standards Web Shop at www.standards.com.au and looking up the relevant Standard in the on-line catalogue.

Alternatively, the printed Catalogue provides information current at 1 January each year, and the monthly magazine, *The Global Standard*, has a full listing of revisions and amendments published each month.

Australian Standards™ and other products and services developed by Standards Australia are published and distributed under contract by SAI Global, which operates the Standards Web Shop.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to the Chief Executive, Standards Australia, GPO Box 476, Sydney, NSW 2001.

This Standard was issued in draft form for comment as DR 06170.

Australian Standard™

**Specification for general purpose
corrugated fibreboard boxes and blanks**

Originated as AS Z17—1962.
Previous edition AS 3537—1998.
Third edition 2006.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia, GPO Box 476, Sydney, NSW 2001, Australia

ISBN 0 7337 7333 8

PREFACE

This Standard was prepared by the Standards Australia Committee PK-025, Packaging Code to supersede AS 3537—1988, *Specification for general purpose corrugated fibreboard boxes and blanks*.

The objective of this edition is to revise the requirements for hygiene and carrying capacity in corrugated fibreboard boxes and blanks.

This Standard specifies those aspects of box construction that are common to most types of fibreboard box. Thus it will be possible for those preparing box Standards or purchase specifications to refer to this document rather than repeating the information for each Standard or specification. This Standard includes the requirements of manufacturing tolerances for blanks, creases and slot dimensions and descriptions of manufacturers' joints.

The Standard may be used to provide much of the information needed in specifying a box. However, a complete specification of a box to be used for a specific purpose (e.g. dangerous goods or export of primary produce) may need to include additional information or may have other requirements as agreed between the purchaser and supplier.

CONTENTS

| | <i>Page</i> |
|---|-------------|
| SECTION 1 SCOPE AND GENERAL | |
| 1.1 SCOPE | 4 |
| 1.2 REFERENCED DOCUMENTS | 4 |
| 1.3 DEFINITIONS | 4 |
| SECTION 2 GENERAL REQUIREMENTS FOR CORRUGATED FIBREBOARD BOXES AND BLANKS | |
| 2.1 SCOPE | 5 |
| 2.2 BOX TYPES | 5 |
| 2.3 FIBREBOARD | 5 |
| 2.4 HYGIENE REQUIREMENTS | 5 |
| 2.5 MARKING AND IDENTIFICATION..... | 5 |
| 2.6 CARRYING CAPACITY | 5 |
| 2.7 THICKNESS | 5 |
| 2.8 WARP | 5 |
| 2.9 MEASUREMENT OF SLOTTED BOXES | 6 |
| 2.10 AIR FLOW RESISTANCE ACCORDING TO GURLEY | 6 |
| SECTION 3 GENERAL SPECIFICATIONS FOR CORRUGATED FIBREBOARD BOXES AND BLANKS USED IN NON-MECHANIZED APPLICATIONS | |
| 3.1 SCOPE OF SECTION | 7 |
| 3.2 COMPLIANCE WITH SPECIFICATIONS | 7 |
| 3.3 APPEARANCE | 7 |
| 3.4 TOLERANCES | 7 |
| 3.5 CORRUGATED GLUE BOND STRENGTH..... | 8 |
| 3.6 SCORING | 8 |
| 3.7 SLOTTING..... | 8 |
| 3.8 PRINTING | 8 |
| 3.9 DIE-CUTTING AND DIE CREASING..... | 9 |
| 3.10 MANUFACTURER'S JOINT..... | 9 |
| SECTION 4 ADDITIONAL SPECIFICATIONS FOR CORRUGATED FIBREBOARD BOXES AND BLANKS USED IN THE MAJORITY OF AUTOMATIC FORMING, FILLING AND SEALING APPLICATIONS | |
| 4.1 SCOPE OF SECTION | 11 |
| 4.2 GENERAL | 11 |
| 4.3 REQUIREMENTS FOR SINGLE-WALL CORRUGATED FIBREBOARD BOXES AND BLANKS FOR USE IN PACKAGING MACHINES | 11 |

STANDARDS AUSTRALIA

Australian Standard

Specification for general purpose corrugated fibreboard boxes and blanks

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE

This Standard specifies manufacturing tolerances for boxes and blanks made of corrugated fibreboard and establishes the minimum level of quality to be expected. It includes—

- (a) general specification for boxes and blanks used in non-mechanized applications; and
- (b) additional specifications for boxes and blanks used in the majority of mechanized forming, filling or sealing applications.

This Standard does not cover any negotiated level of quality; a level that is tailored to specific applications and which may involve special processes and/or controls. Such specifications should be negotiated directly between the box maker, purchaser and machine supplier.

1.2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- | | |
|-----------|--|
| 1048 | International fibreboard box code |
| 1301 | Methods of test for pulp and paper |
| 1301.420s | Method 420s: Gurley air permeance of paper |
| 2400 | Packaging |
| 2400.1 | Part 1: Glossary of packaging terms |
| 2400.6 | Part 6: Paper and paperboard |
| 2582 | Complete, filled transport packages— Methods of test |
| 2582.1 | Part 1: Identification of parts when testing |
| 2609 | Methods for assessing modifications to the flavour of food stuffs due to packaging |
| 2609.1 | Method 1: Sensory analysis |
| 2609.2 | Method 2: Instrumental methods |

AS/NZS

- | | |
|-----------|---|
| 1301 | Methods of test for pulp and paper |
| 1301.426s | Method 426s: Determination of thickness and apparent bulk density or apparent sheet density |
| 1301.430s | Method 430s: Liner adhesion of corrugated board |

1.3 DEFINITIONS

For the purpose of this Standard, the definitions given in AS 2400.1 apply.